



2008 Annual Report

Indianapolis-Marion County
Forensic Services Agency

THIS IS A ROBBERY
JUST GIVE UP
THE MONEY
I DON'T WANT
HURT YOU.





Indianapolis-Marion County Forensic Services Agency 2008 Annual Report

2008 Forensic Services Board

Michael Spears
Chairman
Chief, Indianapolis
Metropolitan Police
Department



Frank Anderson
Marion County Sheriff



Billie Breaux
Marion County Auditor



Dr. Kenneth Ackles
Marion County Coroner



Joseph Bono
Mayoral Appointee
Adjunct Professor
IUPUI Forensic and
Investigative Sciences
Program



Dr. Sam Nunn
City-County Council
Appointee
Professor, IUPUI School
of Public and
Environmental Affairs



We are grateful for the dedication and wisdom of our Forensic Services Board. In spite of their busy lives, filled with other responsibilities, they selflessly gave of their time to serve in 2008.



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Michael Medler
Laboratory Director

Four words from the “mission statement” of the Indianapolis-Marion County Forensic Services Agency (I-MCFSA) guide the daily forensic laboratory operations, “**quality, integrity, accountability, and ethics.**” I-MCFSA personnel commit themselves to these core values in order to provide the criminal justice system in Indianapolis and Marion County with the highest level of forensic laboratory service. Our dedicated personnel are committed to providing forensic services to the entire community.

In 2008, the I-MCFSA worked as a “team” to improve our delivery of forensic services by making progress with timely completion of criminal casework analysis, even though submissions of new cases are not directly under the control of the “Crime Lab.” Notwithstanding, an increase of 1820 in case submissions and 7441 in evidence items for analysis in 2008, points out the efforts our personnel have shown in lowering turnaround times in several forensic disciplines. The established “benchmark” of forty-two (42) days for case turnaround time in a forensic discipline was accomplished in the DNA Section even when case submissions increased by 50%. Obviously, when the Crime Lab turns cases around in a timely manner it aids the overall investigation and adjudication process.

In closing, the I-MCFSA stands ready to provide quality forensic service to Indianapolis and Marion County. The foundation of the I-MCFSA rests within the “team” of educated, experienced, qualified and certified personnel who aid local, state and federal law enforcement agencies with active investigations. I-MCFSA personnel provide forensic expertise that supports the administration of justice by identifying suspects in cases or exonerating the innocent. Oftentimes, the Crime Lab helps bring an investigation to a conclusion with reliable forensic results. The I-MCFSA team remains committed to performing forensic science with **quality, integrity, accountability and ethics** as we serve the criminal justice system and the citizens of Indianapolis and Marion County.

A handwritten signature in black ink, reading "Michael M. Medler".

Michael M. Medler
Laboratory Director



Forensic Service Built on a Foundation of Quality, Integrity, Accountability, and Ethics



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Overview

The I-MCFSA (Crime Lab) began operations in 1985, providing services to all law enforcement agencies in Marion County. The Crime Lab provides scientific testing on items of evidence recovered in criminal cases by its own Crime Scene Specialists, Forensic Evidence Technicians working in the county morgue, and any other police investigator working a crime that occurred in Marion County, Indiana. Testing is done in the fields of Drug and Trace Chemistry, Latent Fingerprints, Serology & DNA Analysis, Firearms, Toolmark, Footwear & Tiretrack Comparisons, Forensic Documents, Photography, Videography and Digital Imaging. The laboratory provides expert testimony in these areas when requested.

Firearms Examiner Comparing Bullets on a Comparison Microscope



Staffing

The I-MCFSA is authorized 68.6 full time equivalent employee positions. This number includes an increase in staffing of 6.4 positions over the 2007 level. A Crime Scene Technical Leader, and three (3) Crime Scene Specialists were added to the Crime Scene Unit. Two (2) DNA Analysts were added to support the burglary investigation initiative, however, in April funding for one of these positions was retracted. Additionally, a part time position was changed to full time in the Chemistry Unit.

Caseload

Over 47,000 items of evidence were received and 11,577 cases were completed by the Crime Lab in 2008. Some areas experienced an increase in case submissions, including: Serology, up 52%; and DNA Analysis, up 53%. Grant monies for outsourcing helped keep backlogs manageable during the year in spite of the increased demand for services in these areas. Even with additional staffing, backlogs increased in virtually every area.

The IMCFSA is still working toward a goal of an average six-week turnaround in each laboratory section. While work remains, progress was made in 2008 in reaching this goal.



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Crime Scene Unit 2008 Inspection

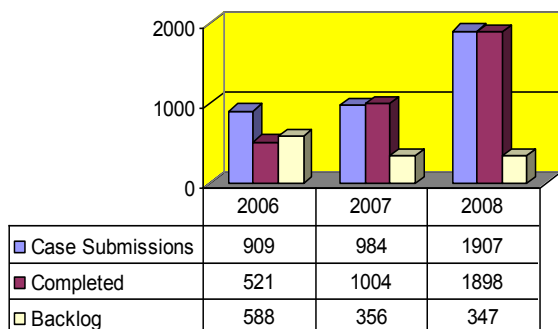
Criminalistics Unit Firearms Section



The Firearms/Toolmarks Section has the responsibility of test-firing weapons, comparing ammunition components to suspected weapons, comparing bullets and cartridge cases from different crimes, comparing toolmarks left at crime scenes with suspected tools, and, comparing shoe and tire impressions from crime scenes with suspected shoes and tires. This section uses the Integrated Ballistics Information System (IBIS) – a tool which digitizes the unique markings left by firearms on ammunition components for uploading to a regional database which can be run internationally – an investigative tool linking evidence from various crimes involving firearms. Fifty-two (52) “hits,” or links between ammunition components and firearms or ammunition components in different cases were made during 2008, bringing the total “hits” in this laboratory to 219 since the installation of this technology.

The staff of the Firearms Section consists of six (6) Firearms Examiners, one of which supervises the section, and two (2) Firearms Technicians. The chart below depicts Firearms Section casework activity in recent years.

Firearms Examinations/IBIS



Note - the 2008 statistics include lab-generated IBIS cases which were not counted in previous years unless they resulted in a “hit.”

Greiss Test - Looking for the Presence of Nitrates on Clothing

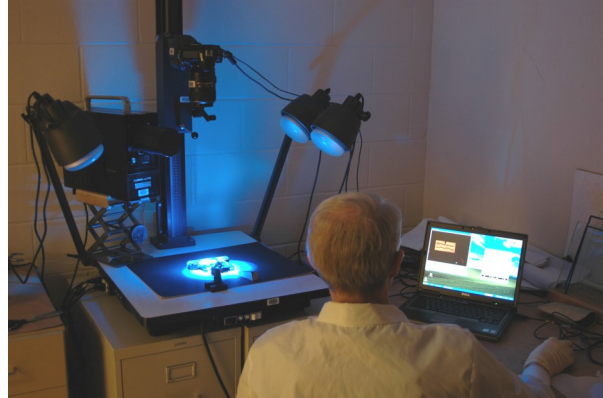




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Digitally Photographing Latent Fingerprints on a Handgun Under Alternate Light

Criminalistics Unit Latent Fingerprint Section

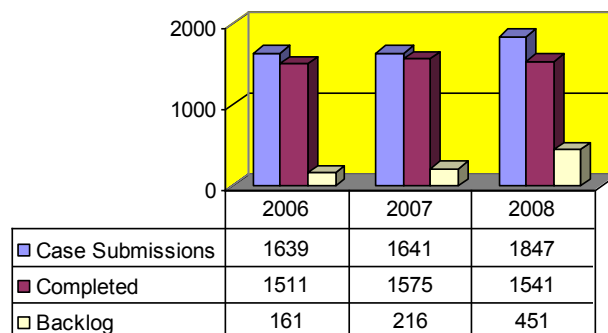


The Latent Fingerprint Section consists of two subsections: Latent Print Processing and Latent Print Comparison/Identification. Staffing consists of four (4) Latent Fingerprint Technicians (processing) and three (3) Latent Fingerprint Examiners (comparison/identification). Technicians handle the evidence first, determining which method to use for processing the evidence and preserving any latent fingerprints developed. Numerous processing methods and proper training guide the technician as to the best course of action that would potentially yield the best chance of developing, lifting and/or photographing any fingerprints on the evidence.

Once latent prints from the evidence have been preserved, they are sent to a Latent Fingerprint Examiner (in the Crime Lab or at IMPD) for evaluation of the characteristics present in the latent print. If suspects are unknown, the Latent Print Examiner may enter the prints into the Automated Fingerprint Identification System (AFIS). AFIS is used to store digitized fingerprint images of known individuals and compares them to latent (unknown) prints entered by the examiner. AFIS then produces a list of individuals whose prints may match the latent prints entered into the system; however, the examiner still needs to make the final determination. The examiner takes this information and conducts side-by-side comparisons, attempting to identify or exclude individuals as having made the latent prints.

A total of 309 subjects were identified by using AFIS to develop suspects on latent prints developed by the Crime Lab during the year. The chart below depicts Latent Fingerprint Section casework activity in recent years. Transition to digital photography throughout the Latent Print Section slowed case throughput in 2008.

Latent Fingerprint Processing & Comparison

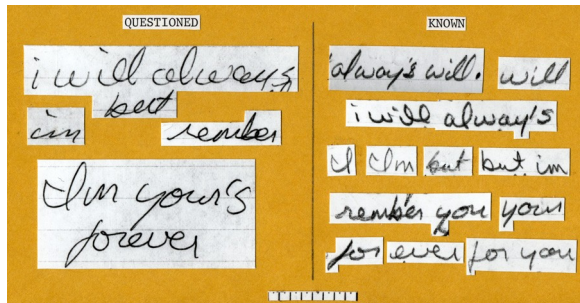




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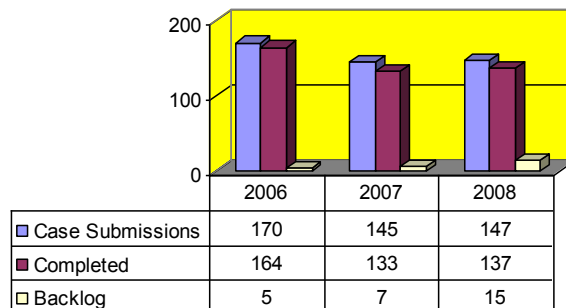
Criminalistics Unit Forensic Documents Section

The Forensic Documents Section is staffed with two (2) Forensic Document Examiners, one full-time examiner and the Deputy Director who acts in a backup role. The majority of the work is comprised of hand-writing comparison – the identification of the writer of documents used in crimes (i.e. charge card receipts, robbery notes). This section also examines indented writing, inks, altered or counterfeit documents, photocopiers, typewriters and other machines or tools used to create documentary evidence.



**Suicide Note -
Chart Showing
Identification
of the Writer**

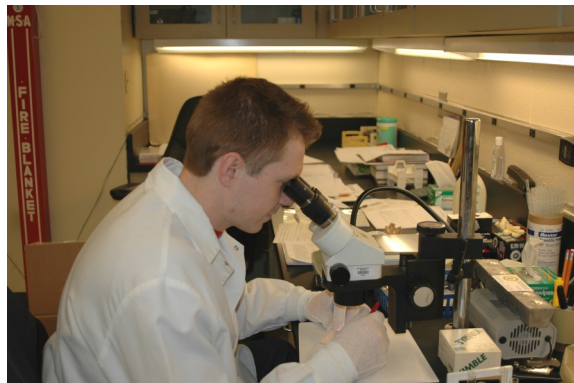
Forensic Document Examinations



Chemistry Unit Drug Chemistry Section

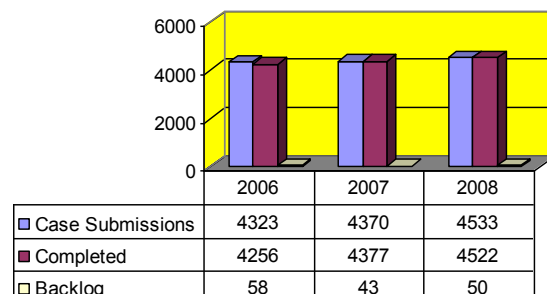
The Drug Chemistry Section is staffed with six (6) full-time Drug Chemists, one of which supervises the Chemistry Unit, and the Quality Assurance Manager who acts in a backup role. This section tests suspected drugs to determine the presence and weight of any controlled substances. Marijuana, cocaine, methamphetamine and heroin are the most commonly identified controlled substances, however, various pills, steroids, and designer drugs are also identified. Multiple tests are conducted on all suspected controlled substances received by the Crime Lab. The testing accomplished on each piece of evidence is determined by scientific principles and protocols used by Forensic Scientists and accredited laboratories throughout the country.

Drug case submissions continued at about the same pace in 2008, as the lab continued to work cases in a confirmatory mode in preparation for court. The Indianapolis Metropolitan Police Department's preliminary testing program which started in 2005 is still successfully spot testing commonly found drugs of abuse, resulting in fewer submissions to the Crime Lab's Drug Chemistry Section.



**Drug
Chemist
Identifies
Marijuana**

Drug Chemistry





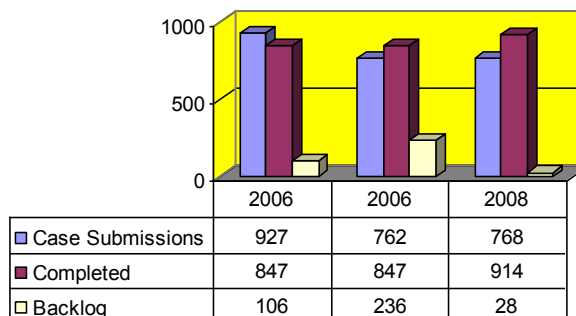
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Chemistry Unit Trace Chemistry Section

The Trace Chemistry Section is staffed with three (3) Trace Chemists. This section tests and/or compares hairs, fibers, fire debris, blood alcohol, physical matches, plastics, auto headlamps, and other evidentiary items. The addition of a third Trace Chemist allowed for a significant reduction in the backlog during the year.

The chart to the right depicts Trace Chemistry casework activity in recent years.

Trace Chemistry



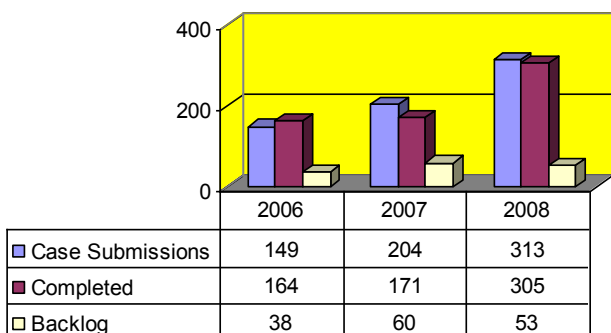
Biology Unit

The Biology Unit consists of two sections: DNA Analysis and Serology. It is staffed with five (5) DNA Analysts and five (5) Serologists; two (2) of which are supervisors in unit - a DNA Section Supervisor/Technical Manager and a Serology Section Supervisor. Two (2) of the ten (10) employees are trained in both DNA Analysis and serology.

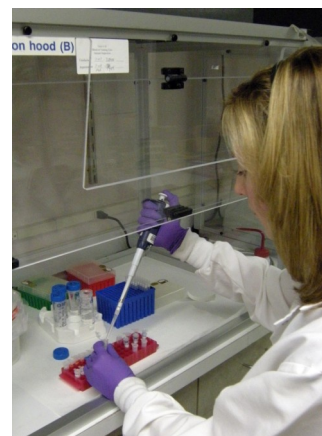
The DNA Section develops DNA profiles from evidentiary samples for comparison with the genetic profiles of suspects or for submission into the Combined DNA Index System (CODIS). This database is particularly useful when there is a biological sample obtained from the crime scene with no known suspects. CODIS allows the unknown profile to be searched against other profiles in the database, generally those of convicted felons and unknown profiles from other cases.

DNA Section casework resulted in thirty-nine CODIS hits during 2008, including nine (9) homicides, eleven (11) rapes, six (6) robberies and eleven (11) burglaries. These are cases which potentially could have remained unsolved, or taken significantly longer to solve, without the use of CODIS.

DNA Analysis



***DNA Analyst
Prepares
Samples for
Analysis***





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Biology Unit

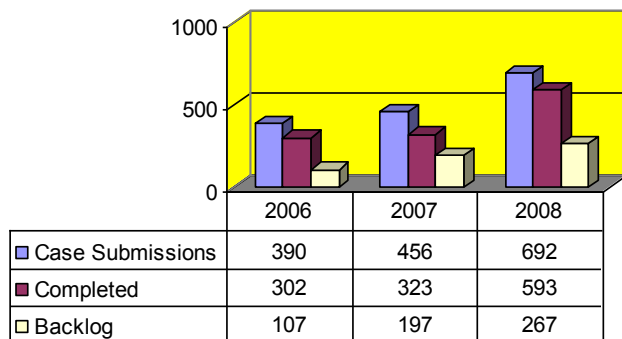
The Biology Unit managed to almost double the number of cases completed in 2008 with the same personnel. This is due in part to many things, including changes in case complexity (i.e. touch DNA cases) and process mapping of the Biology Unit at the beginning of the year.

All DNA cases begin with the examination of evidence by the Forensic Scientists assigned to the Serology Section. They scan the evidence employing various visual, microscopic, and chemical techniques in a search for potential biological stains. Once found, the Serologists document, identify, and prepare samples of the biological stains for the DNA Section. Clothing, bedding, weapons and other evidentiary items are carefully documented and sampled during the Serologist's search for biological stains.

***Forensic
Serologist
Identifying
Sperm Cells***



Serology



Crime Scene Unit

The Crime Scene Unit consists of two sections: the Crime Scene Section and the Forensic Evidence Technician Section.

The Crime Scene Section is staffed 24 hours a day, 365 days a year. Eighteen (18) Crime Scene Specialists, including a supervisor and two (2) technical leaders, are divided amongst three shifts to provide around-the-clock coverage for all law enforcement agencies in Marion County. This section responded to 685 crime scenes during 2008, the majority of which were serious crimes against a person. Specialists process crime scenes by conducting thorough searches, documentation, evidence collection, scene sketches, as well as photographing the evidence and scene using still and video cameras.



***Searching for Bullets with a Metal
Detector***

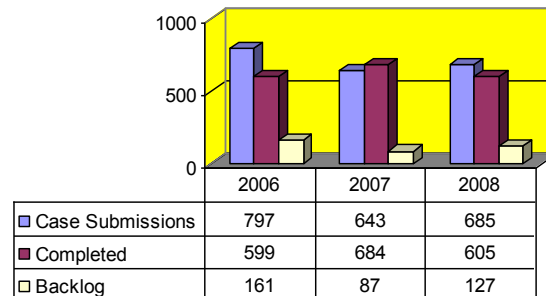


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Crime Scene Unit

The Forensic Evidence Section attends autopsies to take photographs and collect physical evidence, including: clothing, rolled fingerprints, blood, hair, fibers, bullets, and other trace evidence. The four (4) Forensic Evidence Technicians, including a supervisor, of this section also collect and process sexual assault kits from Marion County hospitals to ensure the integrity of the physical evidence from the hospital to the Biology Unit. Forensic Evidence Technicians are also trained to handle video and photo applications within the laboratory, which includes responsibility for the I-MCFSA crime scene videotape library, camera and digital imaging equipment, etc. They are trained to use the lab's dTective Forensic Video Examination System for applications involving surveillance and other types of video.

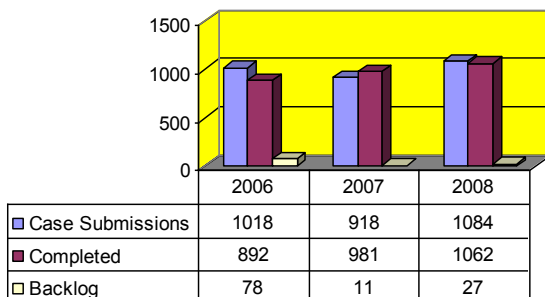
Crime Scene Section



Fingerprinting a Decedent at the Morgue



Forensic Evidence Technician Section



The chart to the left depicts Forensic Evidence Technician casework in recent years. This includes the processing of 494 sexual assault kits and collecting evidence at 219 autopsies during 2008.

Administrative Unit

Administrative staffing consists of nine and six-tenths (9.6) positions (the 0.6 representing a part time position), including: a Director, Deputy Director, Quality Assurance Manager, Operations Manager, Forensic Administrator, three and six-tenths (3.6) Forensic Evidence Specialists, and a custodian. Areas of responsibility include the quality assurance program, budget management, purchasing, information technology, security, human resources, grant management, evidence handling and administrative functions.

Staffing

In order to provide the best forensic support possible to the law enforcement community and the citizens of Marion County, a proposal was submitted and the City-County Council approved the hiring of 6.4 additional laboratory staff members in 2008.



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Administrative Unit

The I-MCFSA maintained its American Society of Crime Laboratory Directors/Laboratory Accreditation Board – *International* Accreditation during 2008, successfully completing the surveillance visit and internal assessment. The purpose of this accreditation includes: to improve the quality of laboratory services; to maintain standards by which the laboratory can assess its performance and strengthen the operation; to provide an independent, impartial, and objective system for a total operational review; and to offer to the general public and to users of laboratory services a means of identifying those laboratories which have demonstrated compliance with established standards.

Grant Management

A component of the continued success of this agency is the receipt of State and Federal Grant monies. This agency continually pursues grant opportunities and has been fortunate in receiving federal and local awards, with 2008 being no different. The I-MCFSA was successful in receiving grant awards totaling over \$960,000 for the purchase of equipment for several sections of the laboratory, to provide training and development for the Forensic Scientists, to purchase supplies to assist in the analysis of DNA cases, to provide overtime for analysts to reduce the case backlog, and for the purchase of a Mass Disaster/Major Crime Scene Vehicle.

Financial Information

<u>Annual Budget</u>			
	<u>2006</u>	<u>2007</u>	<u>2008</u>
Annual Budget	\$4,723,064	\$5,193,493	\$7,281,493
<u>Expenses</u>			
Personal Services	\$3,564,260	\$4,176,670	\$4,527,945
Materials and Supplies	\$ 192,480	\$ 188,180	\$ 261,180
Services and Charges	\$ 561,024	\$ 733,643	\$ 768,039
Properties and Equipment	\$ 153,000	\$ 95,000	\$ 330,708
<u>Funding Sources</u>			
County General Fund	\$4,232,339	\$5,193,493	\$6,320,932
State and Federal Grants (appropriated)	\$ 490,725	\$ 361,269	\$ 960,555

Notes:

1. Starting in 2008, annual budget figure includes grant monies
2. Starting in 2008, expenses include grant monies
3. \$489,577 was returned to the County General Fund in 2008



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Administrative Unit

Procurement

During 2008, 431 purchase orders were processed. Coordinating efforts between the various sections, helped in reducing this number. Efforts continue in the area of utilizing Minority Business Enterprise/Women Business Enterprise companies.

Budget

Budget adjustments were made when necessary and supported by delaying some equipment upgrades or reducing certain projects. The 2008 budget included funding for several new positions. The search for staffing to fill these positions was a top priority for the lab. Overtime was used to offset case backlog increases until new personnel could be hired and trained.

Appropriated State and Federal grants totaling \$960,555 also provided much needed funding to allow the purchase of additional analytical equipment, overtime funding and the ability to continue to provide professional development for the laboratory staff.

***The I-MCFSA
Main Laboratory is housed
with the Marion County
Sheriff's Department at
40 S. Alabama St.***



Fleet

The scheduled fleet upgrade project began in 2007. This initiative called for two vehicles to be replaced during 2008 and three in 2009 and 2010. An inspection of our fleet allowed for a delay of three years on the upgrade project resulting in saved tax dollars. A grant was awarded for a larger mass disaster/major crime scene vehicle. Delivery is expected in 2009.

LIMS – Laboratory Information Management System

Support of our customers expanded this year through implementation of Justice Tracker, an upgrade that allows authorized users 24/7 access to data within the system.

Training and Tours

Over 1,084 people, including Marion County Judges, police officers and college students, received training and/or tours from Crime Lab personnel during 2008.